Lesson 3 - Introducing The Life Science System For Perfect Health, Part I

- 1. The Essentials Of Life Listed
- 2. Pure Air
- 3. Pure Water
- 4. Questions & Answers
- Article #1: The Importance Of Pure Water by John H. Tilden, M.D.
- Article #2: Are Humans Drinking Creatures? by Dr. Herbert M. Shelton
- Article #3: Ama Says Fresh Air Bad For You by Frances Adelhardt
- Article #4: The Breath Of Death by Prof. Hilton Hotema

1. The Essentials Of Life Listed

Every factor in human well-being is also an element of nutrition. All needs are really nutritive needs. Deprivation of any single need may mean our demise or impairment of our growth, development or health. A single factor insufficiently or incorrectly supplied can lead to disease and suffering.

Most people are aware of the essentials of life. But they lose sight of these fundamentals as being factors and influences that are necessary to well-being within the context of society. Therefore, they're likely to violate the very laws of their existence and contribute to their own sickness and suffering.

When in a state of disease, most people do not realize they have brought it upon themselves. They are aided in placing blame outside themselves by a profession that takes the stance that they've had an unfortunate bit of bad luck or they have been invaded by some microbial enemy. Though the needs of the ill differ from those of well people only in that their conditions must be made favorable to recuperation, both ill people and the medical professionals undertake a course of treatment that compounds sickness. Both the physician and the sufferer enter into an attempt to poison the ailing body back into health. The fact is that drugging only makes a body worse.

The causes of health are very simple. Our needs do not change substantially when we become ill. Even illness itself won't occur if the needs of our bodies and minds are properly met.

The nineteen factor elements for optimal well-being are listed as follows:

1. Pure air
2. Pure water
3. Cleanliness—both internal and external
4. Sleep
5. Temperature maintenance
6. Pure wholesome food to which we are biologically adapted
7. Exercise and activity
8. Sunshine upon our bodies
9. Rest and relaxation
10. Play and recreation

11. Emotional poise
12. Security of life and its means
13. Pleasant environment
14. Creative, useful work
15. Self-Mastery
16. Belonging
17. Motivation
18. Expression of the natural instincts
19. Indulgence of aesthetic senses.

Let us explore the first two of these needs in detail.

2. Pure Air

2.1 Air Contents Normal to Humans

Pure air is relatively free of pollutants. It contains only the normal amount of carbon dioxide, carbon monoxide, inert ozone, formaldehyde, sulfur dioxide, nitrogen dioxide, ammonia and particulates, all of which the body is well-equipped to handle.

In other words, there is always water vapor, some carbon dioxide, and a minute amount of carbon monoxide in the air. Carbon monoxide isn't healthful in any sense, but we are equipped to handle it as naturally found in the air from natural sources. There are also particulates in the air including dust or the debris of decomposing products. Pollens, fragrant emanations and other natural effluvia are also present. There are inert gases in air—free gases in very, very minute percentages. Some may be inorganic and toxic, but many come from forms of life. All of these constituents are not a part of the air's chemical composition but are held suspended in it. They are known as variable components.

Air is composed of nitrogen (78.1%), oxygen (20.9%) and fractional parts of less than 1% of argon, hydrogen, methane, nitrous oxide, xenon, krypton, helium and neon.

2.2 Today's Air Is Loaded With Pollutants

Humans have adapted to impurities in air over millions of years. Unfortunately, air today is loaded with immense amounts of pollutants not normal to our adaptations. Even those which we are equipped to handle in minute amounts often pervade the air in overwhelming quantities.

For example, carbon monoxide is often in the air in urban areas in amounts sufficient to seriously affect well-being. In these same areas are huge amounts pf lead, hydrocarbons, and other unwholesome substances in quantities that we cannot handle. Today we get only a fraction of the oxygen-rich air we need for good health. Compounded with the problem of the general pollution of outdoor air, we tend to stay in our homes and workplaces where we constantly inhale our own aerial excreta and staggering amounts of pollutants otherwise generated.

2.3 Many Americans Pollute Their Homes and Bodies by Smoking

Many Americans subject themselves to lung pollution from tobacco smoke. Smoking is a deadly, poisonous habit, a narcotic addiction that slowly kills. Nonsmokers are harmed by the fumes as well as smokers.

We should get as much fresh air as circumstances permit. The ideal is to live in completely fresh air in a pristine state of nature. If nothing changed in our current circumstances except that we lived in fresh air constantly, life expectancy would rise by many years.

2.4 Normal Air Is Continually Cleansed by Forces in Nature

Normal air in nature has its fresh life-giving consistency because it is continually cleansed by the forces of nature. Particulates are continually taken up into the air due to activity in the form of wind and breeze. But, just as constantly, they are dropped down when the air masses become relatively tranquil.

For example, ozone constantly gets into the air but rises to the very top of the atmosphere where it remains. Methane gas constantly rises into the atmosphere from decaying organic matter, but other factors will decompose it back to some other form. Of course, much methane gets trapped within the earth by rock, by liquid overlay, and by other factors. Ozone and methane are both toxic, but it's rare that a great amount of them assault us at any given time or place.

2.5 Air Was Originally Brought to Its Present Consistency By Bacteria

There are certain bacteria called anerobic bacteria. They've been around for a few billion years and were the first type of life on this planet. Anerobic bacteria were photosynthetic in the beginning because there was no organic matter for their soil. It is theorized that these bacteria were able to take on the spark of life, utilizing minerals, light and water.

It is not ours to conjecture too much about the derivation of the original form of life, but perhaps it was some kind of anerobic bacteria that could use sunlight as the spark of life. These bacteria began using water, sunlight and inorganic substances with which oxygen was associated. They could synthesize these raw elements into their life needs. One of the by-products of their metabolization was free oxygen. In time the great amount of oxygen accumulated in the atmosphere that gives it the consistency it now has.

Theory has it that life began in the water medium. No oxygen was present in the earth's gaseous mantle because all oxygen was bound in some compound until the bacteria freed it. The original bacteria evolved into many different forms of bacterial life and into many forms of plant life. All cells are said to be composed of many bacterial cells that united and cooperated for the greater good. Essentially, all life is symbiotic, that is, it is fundamentally in harmony with all other life from the most minute microbe to the largest of the Earth's creatures.

On a practical level, we are concerned with air quality so that we can benefit from it all the more. We seek means by which to take in plenty of air in its purest form. With knowledge and understanding we'll be able to help others conduct themselves in their environments so as to be optimally free of polluted air. Anything that gets into the lungs which the lungs have not been equipped to handle efficiently and naturally is a poison. The lungs have a tremendous capacity for expelling particulates and pollutants. But they can be devitalized by the pollutants and stressed by unceasing efforts to remove extraordinary types and amounts of impurities. The lungs will eventually be overwhelmed and lung diseases often result. You may have heard of black lung, brown lung, emphysema, pneumonia and other ailments of those who live and work in polluted environments. This is especially true of those who work in coal mines, who smoke or who live in highly-polluted cities such as Los Angeles or New York. The lint and dust in cotton mills is notorious for destroying the lungs of those who work in them.

You may know, or know of, people who have lung cancer, emphysema and other afflictions because they smoke, work in asbestos plants or work or live in other heavily-polluted environments. While an atmosphere laden with innocuous dust is pathogenic if exposure is unceasing or for long periods, many substances such as asbestos, tobacco tars and poisons are very virulent in themselves. Despite the lungs best efforts at ridding themselves of these poisons, they are always seriously and deleteriously affected.

2.6 Air Pollution in the American Home

Most homes in America are very polluted places. They have filthy air. (The words filth, poison and pollution are fairly synonymous terms in this context.) People who smoke deliberately and knowingly are intentionally poisoning themselves. Smokers do not seem to recognize that tobacco smoke is very toxic and is one of the biggest polluters of all. But most forms of pollution are unintentional, even unknown.

Humans must have sufficient fresh air. We often read of people jumping from hotel rooms to their deaths on a sidewalk in preference to the tortures of smoke inhalation and fierce heat. In many cases there is no heat and even no imminent danger of suffocation, yet agony and fear prompts the death jump. Yet, all too often, smoke inhalation alone kills. How many times have you read reports of people who die in homes, untouched by anything but smoke?

Cleansers and detergents are used heavily in almost all homes. All of these substances are poisonous although some are less toxic than others. Some exude almost no odor. They are called biodegradable or ecologically-viable cleansers, detergents and soaps.

There is much carbon monoxide in many homes. Carbon monoxide is one of the primary pollutants which emanates from auto exhausts; it is very deadly in the human system, binding the oxygen in the blood. Carbon monoxide also destroys animal and plant life. Plants cannot assimilate it and it actually causes leaves to wither. In the home carbon monoxide is a by-product of cigarette smoke, heating units, and cookstoves that use anything but electricity—and more.

Air that contains sulfur dioxide is extraordinarily poisonous. It is to be found mostly in the air of industrial areas that burn coal. In these areas homes are very likely to be polluted with sulfur dioxide as well as with the extraordinary aerial pollution to which most American homes are subject under conventional modes of living.

Air pollution is becoming quite an issue, especially in some parts of America. In the East, acid rains are a problem for food raisers of all kinds. They are also destructive of buildings, autos and everything else. In the Los Angeles area rare forests and plant life are dying off due to the highly-polluted air. Many crops in that area are adversely affected. Gardeners as well as growers are just giving up. Los Angeles is becoming an area in which neither plant life, humans nor other animals can thrive healthily.

The purity of air is of great importance. Polluted air is a great source of debility and disease. Pure air is necessary for best health. It behooves us to have the best air possible. Unfortunately, the most polluted air is to be found in the Average American home!

Polishes, waxes and other household items give off a large amount of gases. Whether pleasant or unpleasant they're usually poisonous. Aerosols and sprays have become widespread in their use in our homes. Even "foods" such as artificial creams, toppings, etc. come in aerosol containers. The vaporizer is usually a fluorocarbon and/or vinyl chloride. Both substances are toxic and a highly toxic material is used to thin these substances to make them aerate or expand when pressure on them is relieved.

Chlorine is a deadly poisonous element. During World War 1 it was used as a weapon. Many fighters succumbed to it. Even though chlorine is dilute in city water, we can still taste it. Most water supplies have been treated with this toxic element. How many times have you run bathwater or showers and gone into the bathroom to be assaulted by accumulated chlorine? In bleaches and in some other compounds that are frequently used in laundering and cleaning, high concentrations of chlorine are usually released.

Most people do not realize it, but certain types of plywood and other products in their homes are bonded with formaldehyde, which is in insulation, plywoods and plastics. Formaldehyde is given off as a particulate in the air. It may be given off for years in homes and trailers. This substance is quite toxic and many deaths have been attributed to breathing it. Formaldehyde is especially likely to be found in new homes, trailers, mobile homes and new rooms where plywoods and bonded plastics are used.

Oven cleaners are particularly toxic. They're designed to cut grease and to act as solvent for other debris

on enamel. Their fumes are particularly toxic.

Cosmetics are a very big source of pollution in some homes, especially where there are hair sprays and products containing fluorocarbons. The substances sprayed are usually very toxic in themselves, for they have copolymer residues of vinyl acetate. These residues are toxic when inhaled. Fumes from cosmetics that are in contact with the air may smell pleasant but they're also toxic. The only substances that are not toxic in our bodies are pure air, pure water and wholesome food. Anything else in our bodies is toxic and possibly a contributory cause of pathology.

Deodorants are extensively used in America, some one billion dollars worth annually. That's enough to mask quite a bit of body stench. Healthy people do not use deodorants because they emit relatively non-malodorous smells.

Deodorants and antiperspirants are used in minute amounts and the basic ingredients are quite toxic. They consist of a formulation of drugs designed to inhibit the body's secretory functions. This inhibition of body functions occurs because the deodorants are so toxic that the body keeps skin pores closed lest absorption of the toxic drugs occur.

Aside from their presence on the skin, deodorants give off particulates and vapors which are toxic to users and to others. They're particularly poisonous in homes because their pollutants tend to become cumulative. Air in homes, especially in winter, is retained for long periods of time and thus becomes stale as well as accumulating effluvia from the household.

Insect repellents are often used in homes. While they're not immediately as deadly to humans as to insects, the fact that they are deadly to insects establishes their poisonous relationship to all living things. Insect poisons should never be used in the home except under conditions of nonoccupancy.

As additional camouflage for odoriferousness and for its perfumes, many women use powder. Powders are formulated around a base of dust. There are toxic drugs in the formulation as a rule and the dust itself is also toxic. Its fumes or gases are toxic. Anything that gets into or on the body other than those substances normal to it are usually toxic and occasion irritation or intoxication. Usually their toxicity is on a low order, but they can cause pathology in sufficient concentrations. Added to other pathogenic factors of which there are multitudes in the human system and environment, maladies often develop. Certainly extraneous substances worsen and exacerbate existing pathology.

Carpeting can also be a source of pollutants. Long after the dust and odors that they normally give off may have subsided, the synthetics of which they're made decompose and pollute the air. The dust, dirt, filth and debris which carpets accumulate and the excreta that results due to their bacterial decomposition assault us. Among the poisons likely to accumulate in our homes from bacterial decompositon are carbon dioxide, methane gas and ammonia. Any decaying substance, whether it's garbage, meats or other foodstuffs, pollute the air with the byproducts of bacterial activity.

Electric motors in appliances give off pollution. Clothes driers give off carbon monoxide and nitrogen dioxide if they use gas. All drugs and "medicines," especially those that are sprayed into the mouth and nose, are toxic.

Preservatives and additives added to foods to enhance appearance, retard spoilage, etc., are toxic. In cooking their gases permeate our household air and are additional sources of pollution.

Volatile oils, especially from polishes; mustard oil, onions, garlic and other pungent herbs; teas and drinks, etc., are not wholesome in the lungs. If you eat an onion or a piece of garlic, the lungs are one of the eliminating organs through which their toxic components are expelled. The oils of frying foods are not only toxic and very carcinogenic, but, when inhaled, they tend to coat the lungs. Heated oils give off acrolein. While it may smell fine, it is really a trojan horse, for its pleasant odor is contrary to its toxic nature.

Cleansers are used almost universally. Most are chemical formulations that have a number of poisonous substances. Ammonias are usually a primary component, and they are very deadly.

It is possible for the airborne grease from frying foods to accumulate in the lungs. Workers in kitchens who fry food, even if they do not smoke, are likely to have lung problems faster than those who smoke. Grease is not easily expelled from the lungs. For example, a person who works in a fried chicken outlet and uses a fry-o-lator several hours each day may develop a chronic cough and even pneumonia from inhalation of aerated grease from cooking oils. (There are also many other causes of lung maladies and coughing.)

Mechanics get a different type of oil and grease on their hands. These oils are akin to the fats in foods. Mechanics do not leave oil and grease on their hands for very long, though many work with it throughout the day. They recognize the dangers because they suffer its irritations. Most mechanics scrub their hands frequently. Yet they suffer many problems, including skin cancer on their hands. Cells and tissues cannot withstand the unceasing assaults of oil toxicity.

Home air pollution occurs from anything that is burned, cooked or heated (except for boiling water). Stoves and heaters that produce heat by combustion within the home are especially heavy polluters. Wood stoves give off a lot of carbon dioxide, carbon monoxide, tars and other toxic particulates. If you can smell anything, you can be sure that the air is being polluted. However, some gaseous pollution is odorless. Combustion within homes is dangerous on two counts. Some of the pollution that occurs has just been listed. The other count is the partial use of oxygen from inside air. Partially deoxygenized air may not furnish our oxygen needs sufficiently.

Alcoholic drinks give off an effluvia that is unwholesome in the lungs. Of course, it is worse to drink alcohol. Alcohol, like the mustard oil of onions and allicin of garlic, is not used by the body because it is indigestible. The lungs are utilized as one of the avenues of excretion of alcohol. This is obvious because you can smell alcohol on the breath of anyone who has partaken of it. Breathing alcoholic fumes is not healthful and can occasion ill effects, especially for those subjected to breathing alcohol as in breweries.

Condiments, seasonings, spices, sauces and gravies are almost all toxic in the lungs. Black pepper, for instance, is toxic in the lungs, far more so than when in the stomach. All these substances stimulate and irritate when raw. But when heated their toxic components are liberated into the air, and some very toxic effects can result. Most condiments in the intestinal tract occasion irritation, indigestion and other discomfiting effects, especially laxative or diarrheal effects. These latter effects occur because the inflamed intestines rush the noxious matters, including food in the tract, to the nearest exit—the bowels. When condiments are in the air, due to diffusion in the air or due to heating, the irritation to the lungs is similar.

Perhaps you've heard of pruritus anus. This merely means itchiness of the anal region. It may be caused by body elimination of toxic materials through the skin in the anal region. However, it is more than likely due to the toxic components of condiments irritating the skin at the exit point. These can be deposited there by fecal matter before it is cleared from the area. Hot peppers and black pepper can cause this but so can any other condiment. The amount of irritation these occasion on the skin and in the anal region is an indication of their toxicity in the intestinal tract.

Cooking, brewing, boiling and baking of foodstuffs, especially as concocted in the average American home, occasions the pollution of home air with gases, particulates, tars and other unwholesome effluvia. Cooking destroys foodstuffs, and much of their substance is passed off into the air during the process. Cooked foods are harmful when ingested. Their aerial by-products are also harmful in the lungs no matter how much we say savor their fragrance.

Americans are inclined to bring all kinds of chemicals into their homes. Chemicals in the home, wherever stored, slowly oxidize and vaporize, unless tightly capped. But sooner or later they are opened for use. Some chemicals are quite common, notably toothpaste, gargles, lotions, cleansers, lighting fluids and antiseptics.

Antiseptics can also be called antibiotics. They're not in any way anti-septic because the term means "against poison." They're actually antibiotics for, indeed, they are destructive of life. They destroy

bacteria wholesale. Likewise, antiseptics destroy living cells of skin, mouth and lungs. If any odor can be detected from so-called antiseptics, the substance will be harmful.

If all the foregoing sources of home pollution are not enough, there are human wastes and air usage to be considered. Humans give off toxic wastes from lungs and skin throughout the day and night. These wastes include carbon dioxide, carbonic acid and minute amounts of other exudates. Also, the air expelled from the lungs is oxygen-depleted. In closed homes (as they're likely to be in winter) the air becomes polluted from our own effluvia and de-oxygenized from breathing. We're likely to breathe and rebreathe spent air and its load of toxic wastes. All this, coupled with the multitude of other pollutants in homes and the outside air taken into homes makes the average American home a very polluted place.

As a health practitioner, you will want to recognize all the deleterious factors to which humans are customarily subjected. You will be looking for causes of problems from all sources. Knowing that the air quality in homes, outdoors and in factories can contribute to pathology is essential. You may take it for granted that most areas of inhabitation in America are polluted to some extent.

2.7 What We Can Do to Insure a Constant Supply of Fresh Air

By now you may be asking: "How can we insure that we get as much pure air as possible into our lungs in this polluted world?" Air that doesn't have more impurities than normal in nature is automatically pure.

Our message is that it is really impossible to have really pure air in this day and age. We can place ourselves in situations where we have the purest air possible. To get the freshest possible air we should keep our windows open. We should so live and conduct ourselves as to keep our home air free of all those processes and products that pollute it. There is no insurance that we'll have the best air possible no matter what we do or where we go but, relatively speaking, we can have pure air in the outdoors far from civilization, for nature is constantly cleansing the air.

If we live in colder climates where we must live in closed spaces for energy conservation, we can get heat exchangers. A heat exchanger brings in fresh air from the outside and removes air from the household. Through a dual piping and radiator system, the heat of the outside air is transferred to the incoming air to the point of equalization.

As an example, let's say the outgoing air is 72° and the incoming air is 32°. The air will tend to equalize at some temperature in between. The incoming air will tend to equalize at a temperature lower than their normal nominal midway point. This means some additional energy must be expended in heating incoming air to the desired temperature.

When you measure the benefits of heat exchangers in terms of health and the energy conserved through their employment, the cost is a good investment. In energy saved they're worth their cost in a few seasons. In terms of health they pay for themselves many times over very quickly.

Using a heat exchanger is just one thing we can do to insure more fresh air. Most of us can go out and exercise or play in fresh air most days. When we exercise heavily and vigorously in fresh air, we completely oxygenize our systems (in addition to gaining a multitude of numerous other benefits).

Exercise ventilates our entire body. Run, jog or walk. Play an outdoor sport. Any sustained activity that greatly accelerates body function will ventilate your system. Especially important is the oxygenation of our capillary system which results from exercise. Faster and more vigorous blood circulation insures better capillary health due to greater oxygen uptake and rejuvenation of function. Stagnation of the capillary system is a primary contributor to deterioration and disease. The intake of fresh air in conjunction with exercise is of inestimable value.

A device for improving air quality that is becoming popular is the negative ion generator. Research indicates that negative ion generators may have positive benefits, especially in the area of human response. Humans experience euphoria and well-being in ionized atmospheres. But little research has

been done to determine whether the effects are beneficial or drug-like. No evidence has been developed to suggest that either negative or positive ions are any more or any less healthful than the other. What has been determined is that negative ions precipitate dust, participates and toxic materials from the air. If so, this is a positive benefit. I seriously doubt that ionized air gives a drug effect. In a very polluted home a negative ion generator might be helpful. Air cleaners that precipitate particulates, dust and other forms of pollutants are of benefit. Filters are also helpful. As health practitioners, you very well might have to live in or near a population center most of which are polluted, in order to reach more people. When we must place ourselves in a polluted environment, we must suffer the consequences. We can reduce the effect by employing all the technology we can in cleaning our air supply in polluted areas. Just as we are apt to close up our homes and pollute our air, likewise we can close up our home and bring in fresh air that has been purified or filtered. Then we should refrain from in any way contaminating our inside air supply.

Most auto pollution is along highways in most of our country and where there are concentrations of autos. In other areas the air is often stagnant and the exhaust pollutants of the auto become cumulative, sometimes until the air is deadly as in the Los Angeles area. The only suggestion we can make for avoiding carbon monoxide poisoning is to stay away from it. But this suggestion is of little value if you live in Los Angeles or New Jersey or similar areas. In low-pressure areas, carbon monoxide concentrates along the ground.

New Jersey, which is called "The Corridor State," has more auto traffic per square mile than any other state. It also has the most concentrated population. Further, it has heavy concentrations of chemical industries. So polluted is its air in industrial areas and along major highways that it is called "Cancer Alley." More cancer occurs in New Jersey than in any other state. Cancer among people who reside near highways in New Jersey is three to four times that of the average American.

These facts tend to indicate the dangers of, carbon monoxide. They are indicative that, along with all other causes of cancer, carbon monoxide and its concomitant pollution might be the additional straw that breaks the camel's back and causes cancer.

3. Pure Water

Water deserves treatment equally as much as air. In fact, inasmuch as breathing is an automatic process and drinking is a consciously-directed process, water deserves more attention. Though every aspect of our well-being deserves adequate attention, those areas wherein our health is more likely to be endangered or undermined should receive the most detailed treatment. Getting the water we need is one of those areas.

Besides wholesome foods, only three items should ever be taken into our bodies. These are air (about which we've spoken), sunshine (which we'll speak about in another lesson), and water. We'll take up this subject next. At this stage suffice it to say that anything in or on the body other than wholesome foods, air, water and sunshine-all essential body nutrients—is unhealth! This stricture may seem severe. But we cannot exceed the limits of our adaptations. To do so is to subject ourselves to pathological consequences.

Your role as a health practitioner is to keep yourself and your clients in a regime of living as free as possible of the dangers inherent within the context of a "civilized" society. The word "civilization" is in quotes, for what kind of society can be said to be civilized if it harbors grave dangers for its members?

As promised, let's move on to the subject of water. What is water? What is its role in the body? Why do we need it so vitally? What kind or kinds of water should we have? What is the best source for our water requirements? As we get into the subject we'll endeavor to answer these questions.

The expression pure water is used throughout our treatment of the subject of water. If there's anything everyone wants, it is pure water. No one wants impure water. Yet, most people drink anything but pure water. Pure water is purely water-only water and nothing but water.

3.1 Best Sources for Humans

The purest water is distilled water. Inasmuch as an individual lives as he should he will get all or almost all his water needs from a diet of proper foods. Therefore, very little distilled water will ever need to be consumed. Distilled water should be a secondary source of water. Humans are not naturally water-drinking creatures, for they have absolutely no equipment for it as have natural water-drinking animals. Therefore, the proper diet for humans is necessarily water sufficient. A correct diet must contain the pure water that we require.

Fruits contain the purest water of all and also are the finest foods of all. The water in fruits is completely pure; that is, it is without any trace of inorganic minerals or other matters that are likely to combine with body fluids and clog up blood vessels, cells or interstitial spaces. Most Life Scientists are primarily and almost wholly fruit-eaters. (Bear in mind that many so-called vegetables are actually non-sweet fruits and that, technically, nuts are fruits, too.) Because we were almost exclusively fruit-eaters in a pristine state of nature and because a fruit diet is water sufficient, humans never developed water-drinking mechanisms.

Why does the body need water? What role does water play in the body? Why is impure water harmful to the body?

The primary role of water in the body is as a transport medium. It is also the medium for storage of needed organic compounds and electrolytes within the cells. This is accomplished by the water holding molecules and nutrient reserves in suspension.

Impure water harms the human organism because the impurities are invariably poisons. While our foods contain water, water from non-food sources is not our medium for food or nutrients. Minerals in water are dissolved from soil and rock and have no more virtue in the human body than if the soil or rock itself was eaten. The body simply cannot handle inorganic minerals. Inorganic minerals circulate in the body as poisons. Anything at all in water aside from wholesome foods is, therefore, a pollutant or a poison.

Thus, people who drink water are likely to imbibe a plethora of poisons. Different people drink water for different reasons. For instance, many health seekers drink spring water, well water, sea water and other kinds of water in the mistaken belief that it is healthful.

Let's take a closer look at water drinking in America and examine certain probabilities in regard to water-drinking.

- Some people, including Life Scientists, drink little water because they are primarily fruitarians. Their diet is water sufficient.
- Some people drink distilled water either because they are health-aware and want pure water or because their regular water supply is unsuitable for drinking. By far the larger number of Americans who drink distilled water do so because their regular water is so bad, not because of any overall health orientation. They may be said to be undertaking a healthful measure in preference to an obviously unwholesome practice. In either of these cases of people who drink distilled water, water drinking is indulged because of a more or less unwholesome diet (a cooked diet containing salt and other condiments). Our natural diet is water-sufficient.
- Some people deliberately drink mineralized waters in the mistaken belief that their bodies need all the minerals they can get. These are usually "health-oriented" persons who do not realize that

minerals in water as picked up from soil and water are the very same as the minerals in soil or powdered rock and are not used by the body. They shun chemicalized waters from water systems.

- The majority of people drink whatever water is available—mineralized; chemicalized; from their local water system, wells or springs. These people consume a diet that is either water-deficient or so unwholesome as to require heavy supplies of water.
- Life Scientists sometimes drink distilled water. They may do so because they are fasting and not taking in water from food sources, or they may drink distilled water to supplement the water present in their diet. In the latter case, extra water may be required during particularly hot weather, especially if the individual engages in vigorous physical activity.
- Tens of millions of Americans drink soft drinks, coffee, tea, cocoa and a host of other water-containing concoctions when thirsty. These people entertain and stimulate themselves in the process of getting their liquids. While pure water is, in itself, very satisfying to the thirsty, many seek other gratifications which they get by consuming the kinds of drinks just mentioned. All drinking of anything but pure water is less than ideal and most often is quite unwholesome and disease-producing. For instance, many drink fresh vegetable and fruit juices to quench their thirst. Juices, though fragmented foods, are, nevertheless, foods. They should not be used as substitutes for distilled water.

3.2 Chemicals Used in Water "Purification" Are Toxic

Most Americans drink liquids and most liquids taken contain inorganic minerals, fluorine, chlorine and other so-called "chemicals of purification." Bacteria in water are far less harmful than the chemicals that are used to destroy them. Their presence in water usually indicates that the water contains organic matter, but bacteria in water are no more harmful than those we constantly take in by air or those which populate our intestinal tracts. However, water we drink should be pure. No water system in this country furnishes pure water. Invariably it is polluted in some harmful way.

Drinking tap water is fraught with dangers. The US. Public Health Service released the results of research and surveys of waters from various water systems in the U.S. Over eighty carcinogens were found. Most of these were from the breakdown of chlorine in water systems or its combination with other chemicals. Chlorine itself is a carcinogen. Chemicals from agricultural fertilizers, chemical industries, pesticides and homes pollute our waters. Sulfur, iron, gypsum, calcium, magnesium and other inorganic minerals are toxic in themselves. Purification systems, so-called, do not remove these minerals. They are designed to remove bacteria, which are far less harmful. Purification systems add chemicals rather than remove them (except in some systems where the water supply is deadly at its source). This is especially true of some waters in Louisiana and New Jersey.

Fluorine is added to water, not as a purifier, but as a mass medication. This waste product of the chemical and metals industries has been rammed down our throats, so to speak, in the mistaken belief by many that it will prevent tooth decay. Obviously, it doesn't work, for tooth decay is just as rampant today as before—in fact, it t is worse than ever. Fluorine is in the water of more than half our population's water supplies. Inorganic fluorine compounds are carcinogenic and deadly. Poisons are never the basis of health. Our teeth are sabotaged by dietary practices also.

3.3 Spring and Well Water

As mentioned earlier, many people think mineral water, well water, spring water or other impure water is just what we need. Spring water, waters from mountain streams and waters to which certain minerals have been added are quite popular. In New York City and in some other places, such waters are the rage. Many people in these places will not touch their city water supply for drinking purposes. But processed waters which have had mineral concoctions added and waters from springs and mountain streams are in vogue. While these waters with their mineral content cannot possibly be as harmful as the mineralized and chemicalized water supplies, they are, nevertheless, very unwholesome. Distilled water is available

in New York City but it is relatively neglected in favor of so-called natural waters.

Many waters, especially imported spring waters, are prized for their peculiar tastes. Some waters are carbonated to give them extra attraction. But all such waters are harmful. Pure water is pleasant to drink and has no taste or kick whatsoever. If you're thirsty, pure water is the most satisfying of all, even without any taste thrill.

Though you should get most of or all your water from your food, you should never try to get anything from water but water.

For the purposes of emphasis and enhanced understanding, we will repeat what has already been stated about water: Anything in water as drawn from tap, well, spring or stream is inorganic and harmful. The body cannot digest or metabolize inorganic substances. Other than air, water, and sunshine, the body cannot utilize anything except organic compounds as found in food. All else is poisonous. Inorganic materials cannot be utilized; they clog up our bodies if not eliminated, and they combine with body fluids, oils, compounds and wastes and form substances that cake our vascular system. They are deposited in our joints and muscles, interstitial spaces, organs and lymphatic system. Both deranged foods, that is, those that have been cooked and processed, and impure water contain inorganic minerals, which are harmful to our organism.

People with the debris of impure water and cooked food in their systems usually do not eliminate all of it. When these substances are in an active state, that is, when they are circulating in the system, the body is in a frenzy. Leucocytes (white blood cells) proliferate, pulse rates increase, and often enough, these people are stimulated. The stimulation usually begins within 15 to 30 minutes after drinking or ingestion and lasts until the materials are eliminated or sidetracked in the system—as in plaques which form in arteries.

Just as impure water contains harmful, non-usable inorganic minerals, so do cooked foods. This topic will be covered in depth in a later lesson.

There are several schools of thought in this country that advocate drinking mineral-containing water such as well water, spring water and mineral water. They say that mineral-containing water is needed because the body requires the minerals from it. In addition, they say that distilled water causes heart attacks and leeches needed minerals from the body, causing tooth decay, pyorrhea and osteoporosis and that distilled water is dead water and fish cannot live in it. They contend that water containing minerals will correct these problems as well as preventing them from happening in the first place.

Proponents of mineral-containing water attribute the superb health of the Hunzas to mineralized water. The Hunzas are one of the healthiest peoples in the world. They supposedly drink a frothy white mineralized water from glacial runoff.

Of course there are valid responses to these arguments. To the implication that we need the minerals in impure water, we point out that, if our diet is proper, we get more than we need of minerals of all kinds. Further, the minerals in water are totally unusable, thus making them a toxic burden within instead of nutritional. Water is needed in the body for itself, not for any incidental impurities it may have picked up from soil and rock.

Rather than distilled water causing heart attacks, it is the other way around. Distilled water does not leave behind any indigestible debris from unusable inorganic minerals. Those who drink mineral-containing water are often found to have heavy plaque in their systems. The rejected minerals which the body cannot use often combine with cholesterol and other fatty substances to form plaque. These block the arteries. The rejected minerals are also likely to be put aside in the body in spaces that exist. Notably is this so in the cranial cavity where the spaces of lost brain cells are filled in by minerals, thus leading to ossification of the brain. This is a cause of senility.

How pure water could leech minerals from the body has received a thorough refutation from physiologists. An important thing to remember about water and everything else put into the body is that

it is done unto by the body. It does not do unto the body. Those substances which seem to act on the body, as in the case of unmanageable acids, compounds and chemicals, are poisons. The body is the master of its domain. Following this reasoning, soft water does not leech minerals from the body. The body uses water. Water doesn't use the body. Water and other foodstuffs are under the control of the body while in the body. The body does what it wants to with water. It excretes the water if it's not needed. Along with the water it excretes mineral matter that it no longer requires. The kidneys are the final arbiters of what will be excreted and what will be returned to the body economy for use. For instance, the body recycles about 95% of its iron regardless of the water we drink. It also recycles many other mineral compounds or salts. The body is very conservative with its nutrient supplies.

An example is eating watermelon. If you eat watermelon, your urine will be completely clear. There will be almost no mineral matter in it to color it. The very pure water of watermelon that is unneeded by the system is speedily expelled. Very little mineral or other matter will be in it, for the body is doing unto the water. The water does not circulate freely in the body. The body retains or expels the water according to its need.

On the other hand, if you are fasting or under any other condition in which you're not taking water from food and the body is conserving its water supply, your urine will become very dark yellow because the body is giving up more wastes and more mineral matter relative to the water it is expelling.

What the Hunzas (or North Pakistan) drink is not responsible for their health. Water is a need of life but total health is dependent on healthful living. Water is but one element of many. Travelers who have gone there find that the Hunzas really drink very little water. They're primarily fruit eaters. The water they do drink is permitted to settle first. As the glacial runoff comes rushing down the mountains it picks up minerals as debris rather than holding them in solution. That is, the water has silt in suspension rather than minerals in solution. This silt is the basis of Hunza health, true, but because it is deposited on their fertile gardens, not because they drink soil and rock in their water. The water itself comes from relatively pure snow. Very few minerals are in solution by the time it has rushed from the heights to their catch basins below. Only a few minutes of time in contact with minerals accounts for the mineral complement of these waters.

Again, how can waters be responsible for a condition of health? If drinking water was the secret for great health, then all we'd have to do is drink the kind of water we need and not worry about food, exercise, sleep or anything else. Water would take care of everything. Healthful living would be unnecessary.

Next let's examine the argument that pure water is dead water and that fish can't live in it. As you know, many fish live in the ocean. We can't drink sea water, for we'd quickly die. It has a heavy complement of minerals - sea water is richer in minerals than any water in the world. Other fish live in rivers, creeks, ponds and lakes. You don't drink water out of rivers, ponds and other places where fish live. Such waters contain the excrement of fish and other creatures, decaying leaves and other organic matter. In fact, we don't drink from fishy waters for a very good reason: It's unfit to drink. Further, water, whether fish live in it or not, cannot be described as living or as dead. In short, there can be no living water, for it is an inert lifeless compound at all times.

It is true fish cannot live in distilled water. Distilled water has no air in it. Neither does it have the food supply a fish requires. Thus it can be seen the argument is without any merit.

To repeat: If we're eating the diet to which we're biologically adapted, we do not have to drink water except on those occasions when we must use unusual amounts of it to refrigerate ourselves as in heavy physical labor in hot weather.

Why do most Americans drink so much water and other liquids? Cooked food eaters require copious amounts of water. People who take in so many irritants or poisons as found in heat-deranged foods; in condiments, especially salt and other seasonings; and in unsuitable foods such as grain and animal foods, need this water to help hold toxic materials in suspension so that they offer less harm to cells and

tissues.

People who eat a wholesome diet require less water than people who eat an unwholesome diet. On wholesome diets there is usually sufficient water in the foods to meet all needs whereas, on an unwholesome diet, abnormal amounts of water are required to help cope with the irritants, stimulants, excitants or poisons within.

Edema or dropsy, for instance, is a disease of those who eat cooked foods and/or salts and other condiments. The body takes on extra water to hold these toxic materials in suspension. Until the body can dump these they are stored in likely areas, often the feet and legs. A few days of fasting enables the body to catch up on its housecleaning. It thus will expel the waters and purify its fluids and tissues.

This concludes our examination in depth of the first two essentials of life, air and water. In the next lesson we'll keep up consideration of other of life's essentials.

4. Questions & Answers

With the catalog of things you've listed I feel uptight even considering using a bar of soap around the house. Isn't there anything we can use that is non-polluting with which to clean house, floors, clothes, dishes and our bodies?

> Yes, there are products that are relatively non-polluting and which yield excellent results. For cleaning clothes you should consider Basic-L from Shaklee products. For cleaning floors, dishes and even cars a solution of Shaklee's Basic-H will do wonders. Amway and other companies also produce similar non-polluting biodegradable products.
>
> For your body you need no soap or cleanser. A good fiber brush or washcloth is all you need while under a shower or in a bathtub. If you want to use a cleaner on your body, Shaklee's Basic-H is fine.

Can't we use any cosmetics at all?

> Of course you can use cosmetics, but keep in mind that not one is healthful. Moreover they are unneeded by a healthy person. They detract rather than add to beauty. And they only compound skin problems for an unhealthy person. Beauty is natural. When in health your eyes and skin radiate their condition, just as they look sallow, pallid and in poor tone when unhealthy. We advise against the use of cosmetics under all conditions. Also, skin creams and oils of all sorts, including suntan oils and lotions only complicate the problem they are used for and cripple the body's oil producing ability.

I have a friend who smokes a pack and a half of cigarettes daily, drinks beer and eats junky foods. He appears to be in excellent health and is quite active. By all that you've said he should be a corpse. How can you explain something like this?

> How old is your friend?
>
> **34.**

Your friend is still, obviously, only a babe relative to potential and is still living on youthful capital. He might continue this pattern for another five, ten or even twenty years, but the penalty for not meeting life's needs correctly must sooner or later be suffered.

When you read the disease statistics and see the human wreckage resulting from the tobacco, alcohol and junk food habits, you'll know that most humans exhaust their endowments rather quickly, even in their thirties, and succumb to cardiovascular problems, chronic cough, cancer or other degenerative diseases.

Most smokers know the dangers of their habits but feel themselves to be exempt from them —it's something that always happens to the other person. All sins against our bodies must be paid. There is no dispensation in nature.

You've condemned deodorants. Are they very harmful? What is a person to do to control body odor?

Deodorants are poisonous. Their toxic effects cause the skin pores at points of application to close up so as to exclude their chemicals from the inner sanctum. This prevents body perspiration and exudation. They are properly called anti-perspirants for this reason. A person who has body odor should strive to go to the source of the problem. Body odor is not natural. Healthy persons do not have body odors. Foul smells are produced by a foul system. Clean up the body and it ceases to exude unpleasant smells.

Do you mean that people who have body odors, bad breath and so on are really sick inside?

That is the case. Healthy cells, tissues, fluids and organs do not smell rotten or foul. Obnoxious odors come from decomposing materials.

Just the other day I read that distilled water, because it's heated in the distillation process, causes leukocytosis just as cooked food does. As you advocate distilled water, what do you say to this?

This is untrue. Leukocytosis, the proliferation of white blood corpuscles, results from poisons entering the bloodstream. The inorganic debris resulting from cooked foods will cause this malady, but distilled water causes no decomposition or poisonous substances. The distilled water was water before, during and after the process of distilling. It was not changed except that impurities it held before distilling have been left behind. The truth is that mineralized water causes leukocytosis. The inorganic minerals of water are toxic and cause a toxic reaction by the body. Leukocytosis is but one of the body's defensive mechanisms against toxic materials. Those who employ this argument are trying to defend the use of mineralized waters, but there is no defense for using impure waters.

I've heard it said that distilled water will cause heart attacks. In fact, this claim was made as a result of a scientific study in England. Do you deny this?

Yes, investigators of the report found that, in a certain English city whose people drank hard (heavily-mineralized) water, the death rate from heart attack per 100,000 was 436 per year. The death rate in a nearby city that had soft water (water with fewer minerals) was 448 per year, just 12 deaths more. This implies that perhaps soft water causes heart attacks and minerals in solution prevents them. But these investigators found the following significant omissions from the report: The soft water drinkers had a lead pipe system throughout the city whereas the hard water drinkers had a copper pipe system for the most part. Lead is much more toxic than copper.

Does fluoridation really make teeth stronger and healthier?

> Absolutely not! Fluorides in an inorganic form are toxic. Ingested fluorides have an affinity for calcium. Insofar as they unite with calcium they destroy bone and teeth. The body defends against fluorides by, at first, hardening the bones and teeth. Then they become brittle and break down under ordinary eating. St. David's, Arizona, has natural fluorides to the extent of about eight parts per million of its drinking water. Perhaps there is no worse example of poor teeth in America than there. About 50% of America's drinking water has been fluoridated for some 30 years. For all that, America's collective mouth is still the biggest disaster area of the body! Nearly 99% of Americans have bad teeth. One in every seven have no teeth at all. Inasmuch as almost all of these are adults, that means one in every five adults have no natural teeth.

Article #1: The Importance Of Pure Water by John H. Tilden, M.D

Water is not looked upon as food by laymen, but it should be classed with food. It certainly is fully as important. An individual may live 40 to 100 days without food whereas survival beyond seven days without water is unlikely.

Water should be obtained from normal food sources as much as possible. It is easy enough to get our water needs from fresh fruits and vegetables, as most of these foods carry about 90% water.

The amount of water taken into the system by the average person amounts to from three to four pints daily. This can vary under different circumstances. In the summer more fluid is used than in the winter. Water is utilized by the body as a refrigerant through evaporation and, consequently, we require more in the summer. On the other hand we are more inclined to consume higher water content foods in the summer such as melons, peaches, grapes, tomatoes, etc.

Laborers consume more water, of course, because physical labor generates internal heat that must be reduced through evaporating water from the lungs and skin.

Water Is Actually a Food

Water enters into the composition of every tissue and forms about 65% of the weight of the body. It is obvious that this percentage must vary in different individuals for many reasons.

Water should be recognized as one of the most important foods, for it is essential to the body.

Water Should Be Pure

Rainwater is soft and supposed to be the purest of natural water, though this is doubtful due to widespread air pollution. Few people relish the taste of rainwater, for it has a peculiar taste. The fact of the matter is that most people are accustomed to water with some mineral content that gives it a little taste; but, on the other hand, they will shun waters of heavy mineral content, especially if those minerals be gypsum, sulphur, iron, etc.

Minerals in Water Clog Up Body

What is called "hard water" is in fact water that is heavily laden with minerals. Wells in limy sections of

the world furnish water heavily charged with lime. Such water is not good to drink. People in such locales will be troubled with limy deposits in the body if they drink such water.

It is necessary to secure as pure water as possible. It is just as necessary as securing pure food. Nothing should be taken into the body that is not as pure as can be had. Impure water is the source of many diseases and general body degeneration.

Article #2: Are Humans Drinking Creatures? by Dr. Herbert M. Shelton

"What a stupid question!" exclaims the reader, "Everybody knows that humans are drinking creatures and always have been."

It is quite true that universally, throughout history, in all countries, in all climates, at all seasons of the year and at all ages of life, humans have been drinking animals. It is equally true that all the evidence afforded us by protohistory reveals that throughout the protohistoric period, humans were universally drinking animals. Existing so-called savage cultures are commonly looked upon as survivals of prehistory. If this position is a valid one, then the evidence that is afforded us of the practices of prehistoric humans would reveal that they were universally drinking creatures.

Drinking Not Natural to Humans

If we view the animal kingdom, we discover that there are animals that drink and animals that do not drink. Even many desert animals do not drink water. There are also animals that do not inhabit the deserts that do not drink. It has been seriously suggested that by his constitutional nature man belongs to the non-drinking section of the animal kingdom. This is to say, water drinking by man is an acquired and not a native practice. Many have taken this suggestion seriously and have refrained from drinking water for periods of years and have advocated the non-drinking practice for all.

Dehydrated protoplasm is lifeless dust. It seems to be true that where there is no water, there is no life for plants and animals and microscopic beings require Water in order to carry on the functions of life, that they may live. Nobody denies this. The question in issue is not the reed for water, but the source from which it is to be derived and the manner in which it is to be taken.

Evidence Indicates Drinking as Perversion

In 1815 a book by William Lambe, M.D. of London was published under the title *Water and Vegetable Diet*. In this book Dr. Lambe attempted to show the advantages of a vegetable diet over a flesh diet or a mixed diet and the advantages of pure soft water over hard water. At the same time and in this same book he raised the question: Is man a drinking animal?

Perhaps no one had asked this question before. But the question has been argued both pro and con by numerous intelligent men and women since Dr. Lambe propounded it, and it is still being argued, sometimes rather heatedly. Let us, at this time, consider some of the reasons put forth by Dr. Lambe for considering water drinking an acquired practice.

Historic Attitudes Toward Water

As was the custom of his time, Lambe begins his consideration by quotations from the ancient works

attributed to the legendary Hippocrates and reveals the fear of water in acute disease which gripped the profession for so long had its origin at the very beginning of the medical system. He quotes "Hippocrates" as saying: "I have nothing to say in favor of water drinking in acute diseases: It neither eases the cough, nor promotes expectoration in inflammation of the lungs; and, least of all, in those who are used to it. It does not quench thirst, but increases it. In bilious habits it increases bile and oppresses the stomach; and is the most pernicious, sickening and debilitating, in a state of inanition. It increases inflammations of the liver and spleen. It passes slowly, by reason of its coldness and crudeness; and does not readily find a passage either by the bowels or kidney."

Following the quotation from Hippocrates, he quotes Van Swieten as saying: "While girls are daily sipping tepid water liquors, how weak and how flaccid do they become!" Lambe says: "And the same writer positively affirms that, by the abuse of tea, coffee and similar liquors, he had seen many so enervate their bodies that they could scarcely drag their limbs; and many had from this cause been seized with apoplexies and palsies."

Thus it will be seen that the evils that flow from drinking tea and coffee are attributed, not to the poisons contained in these brews, but to the water which composes most of the brew. Water and not caffeine and theine and the other poisons of tea and coffee is the evil.

Impure Waters Pathogenic

Lambe next considers popular prejudices and tastes concerning water and its salubrity or lack of it as it is derived from various sources and contains, according to its source, different mineral or organic matter. He points out that many people in many parts of the world are very fastidious in their selection of the water which they drink, preferring water from one well or one stream or one spring and rejecting water from other sources. Lambe examines the drinking of mineral laden waters from marshes and swamps and the drinking of stagnant water and ascribes many evils to this habit. Many of the things he attributes to such water drinking are now known to be due to other causes; but even if he had been correct in all of his guesses, these facts could not properly be used to condemn water drinking. They condemn, not water, but impurities sometimes contained in water and form a basis for the condemnation of drinking, not water, but impure water.

Lambe suggests that the evil effects of water drinking have been the chief cause that has induced man to turn to alcoholic liquors. To escape from the evils of water drinking man plunged into the greater evils of alcoholism. It is not to be doubted that in some parts of the world where the inhabitants drink much beer and wine, there is a strong tendency to refrain from water drinking, not because water is regarded as essentially unhealthful, but because the waters of these areas are regarded as impure and unwholesome. Let us turn, however, to Dr. Lambe's effort to establish the soundness of his no-drinking plan.

He says:

> "Having condemned water and attempted to show experimentally its noxious influence upon the system; having condemned spirits and fermented liquors, from the authority of the most enlightened medical writers and the common experience of mankind, it must follow that there is no species of drinking which I approve. And, indeed, I have already ventured to assert that drinking is an unnatural habit; in other words, that man is not naturally a drinking animal.
>
> "To those who cannot raise their views above the passing scene, who think that human nature must necessarily be in every situation the same as they observe it in their own town or village; to those, in short, who look for knowledge in the prattling of the drawing room, or the gossip of the grocer's shop, I know that this appears a strange, if not a ridiculous assertion. We say, with great confidence, that water is absolutely necessary both to man and beast. But the strength of the evidence is not equal to the positiveness of the assertion.

> "In fact, we know very little about the habits of animals, except of those whose natures we have changed and corrupted by domestication. All that the natural historian can do with regard to the wild species is to describe their forms and such of their qualities as have fallen under observations; these last must of necessity be very imperfect. Imperfect, however, as it is, we know enough to be certain that the assertion of the necessity of the use of water to animals is, to the extent to which it is carried, absolutely groundless."

Many Animal Species Do Not Drink Water

" 'I have known an owl of this species,' (the brown owl) says M. White, 'live a full year without any water. Perhaps the case may be the same with all birds of prey.' There was a llama of Peru shown in London, a year or two ago, which lived wholly without liquids; it would not touch water. In some of the small islands on our coast, on whir-there is not a drop of water to be found, there are, I am told, rabbit warrens. Bruce says, 'That although Zimmer (an island of the Red Sea) is said to be without water, yet there are antelopes upon it, and also hyenas in numbers.' To account for this, he suspects that there must be water in some subterraneous caves or clefts of the rocks. This, however, is only supposition. The argali, or wild sheep, from the country in which it is found, it is certain, does not drink. Mr. Pallas says of it, 'This animal lives upon desert mountains, which are dry and without wood, and upon rocks where there are many bitter and acrid plants.' He further says of it, 'There are no deer so wild as the argali; it is almost impossible to come near it in hunting. They have an astonishing lightness and quickness in the chase, and they hold it for a long time.' How wonderfully, therefore, is this animal deteriorated by domestication, and by being forced to live in situations and to adopt habits unsuited to its nature!"

Humans Have No Natural Drinking Equipment

"Let us, therefore, consider man again, for a moment, as we may suppose him fresh from the hands of his Maker, and depending upon his physical powers only for his subsistence. We must suppose every animal so circumstanced, to be furnished by nature with organs suited to its physical necessities. Now I see that man has the head elevated above the ground, and to bring the mouth to the earth requires a strained and a painful effort. Moreover, the mouth is flat and the nose prominent, circumstances which make the effort still more difficult. In this position the act of swallowing a fluid is so painful and constrained that it can hardly be performed. He has therefore no organ which is naturally suited to drinking. He cannot convey a fluid into his mouth without the aid of some artificial instrument. The artifice is very simple, it is true. But still the body must be nourished anterior to all artificial knowledge. Nature seems therefore fully to have done her part toward keeping men from the use of liquids. And doubtless on a diet of fruits and vegetables there would be no necessity for the use of liquids.

"If it be true therefore that other animals require water, it would not follow that man, whose organization is different, would require it likewise. But we, in fact, know very little about the habits of animals. Our common domestic animals certainly drink. But it appears, as far as my information extends, that common water has the same effect upon them as upon man; and that they are more or less healthy, according to the purity of the water which they use."

Observations Upon Humans' Water Needs

Dr. Lambe violates one of the cardinal principles of logic, to wit: Nothing can be used as evidence until it is known, when he predicates his argument for man as a non-drinking animal upon what was not known about the drinking habits of animals. Some of the observations which he records were faulty and these constitute a very insecure basis upon which to found important conclusions. It is now well known that many of the animals which he considers non-drinking animals do drink in the wild state. It should also be noted that animals that do not drink, many of them living upon the desert, do not become dehydrated for lack of drink, whereas man, under the same circumstances, dies from dehydration as

certainly as does the cow or horse. His argument that if man were intended to drink, he should have been born with a plastic straw in his mouth or a silver chalice in his hands, is hardly valid. It is true, however, as he points out, that with an abundance of juicy fruits and succulent vegetables in his diet, man can go, under ordinary circumstances, for long periods without drinking. In doing so, he does not go without water, but obtains his water free of organic and mineral contamination, in the form of fruit juices and vegetable juices. It is doubtful that this would suffice on the desert; it is certain that hard physical labor in the summer's sun will create a demand for water that such eating will not provide. Under such circumstances, one may be able to obtain all the fluid necessary by drinking fruit and vegetable juices between meals, but this constitutes eating between meals and is certainly a greater evil than would be the drinking of occasional glasses of distilled water.

Juices Are Food

Fruit and vegetable juices should be regarded as food, not as drink, and should be taken as part of the fruits or vegetables containing them. Separated from the organic combination in which they occur, they lose much of their value. Drinking fruit and vegetable juices between meals definitely leads to overeating and most certainly disturbs the process of digestion.

It would be folly to try to meet the demand for water in the fever patient by filling him with fruit and vegetable juices. Pure soft water certainly does not have the effect in these cases described by the legendary Hippocrates. Neither does water affect the fasting individual in the manner described in the so-called Hippocratic writings. To condemn water drinking because in certain pathological states drinking distresses the patient is similar to condemning food because in certain pathological states eating causes distress. It is similar to condemning sunlight because in certain diseases of the eye, exposure to light causes distress and pain. The true test, as all Hygienists know, of the value of any substance or practice is its use or its rejection by the healthy organism.

Article #3: Ama Says Fresh Air Bad For You by Frances Adelhardt

In the February issue of *Moneysworth* appears the headline "Too Much Fresh Air Can Become Health Problem." The article is based on a report in the *Journal of the American Medical Association*.

What ills are attributed to fresh air? Listed in this article are insomnia, nightmares, weakness, exhaustion, heart irregularities, dizziness, numbness of hands and feet, shortness of breath, chest pains, yawning, stomach discomforts, muscle cramps, stiffness and anxiety.

This report is of the same warp and woof of a previous report that was discussed in Issue 3 of *Total Well-Being*: Medical opinion holds that "oversleeping" is unhealthful. Medical opinion here is that the body will "oversleep" if permitted and that sleep beyond 7 to 8 hours will lead to assorted illnesses—substantially the same ones as fresh air supposedly causes!

We need to breathe and we need to sleep to stay alive, but the medicos are telling us that we mustn't overdo it! They apparently put breathing and sleeping in the same category as eating, which we must also do to stay alive. We all know that overeating is harmful. But eating is a voluntary action. We are always consciously aware of it. If we would eat only when hungry and stop eating when hunger disappeared, we could not overeat. The body is self-regulating when its instincts are followed. But we eat for other reasons than hunger and genuine need, so our overeating results in health problems.

Now what about sleeping? This normal bodily need and function is also regulated naturally. We become sleepy when sleep is needed. If we don't fight it off by taking pep pills or coffee, we naturally drop off into a state oi unconsciousness when our bodies need sleep. And we win remain in this state until our nerve energy is sufficiently recovered—unless our sleep is prematurely put to an end by a jangling alarm clock or other disturbing influence. It is impossible to sleep if we do not need sleep. Sleep cannot be "stored up" for future use.

Air is another of the normal needs of life, and breathing is nature's way of supplying our bodies with air. Breathing is the most automatic and unconscious of all our bodily functions that supply life's needs from outside sources. We can go for weeks or months without food and for days without water, but going for only a few minutes without air results in death. Air is such a constant necessity that breathing must be done unconsciously while we sleep.

Now medical expertise is telling us in this article that if we breathe too much fresh air we can become sick!

To be sure, there *is* such a thing as overbreathing. We can do forced deep breathing, but after a few minutes of it the body responds to our folly by cutting off oxygen to the brain. Hallucination and unconsciousness follow, putting an end to the conscious forced breathing, after which normalcy is restored.

This overbreathing is not what the physicians are talking about, for they say, "Hyperventilation—taking in air in excess of that required to maintain normal oxygen levels in the blood—is an *unconscious* action on the part of the individual..." How do they say we can "over-breathe?" By getting too much oxygen in our air. This is why they claim that too much fresh air is bad for us.

Just what is fresh air? It is the opposite of stale air. Stale air is air that has been breathed and expelled. The life-giving oxygen has been appropriated by the body, and carbon dioxide, a waste product, is given off along with other waste gases of elimination. If one had his head enclosed in a plastic bag that was sealed at the neck and he had to constantly breathe and rebreathe the same air, he would not live long. It would be much the same as trying to live on one's own feces and urine. Stale air, then, is polluted air. The air that most of us breathe in unventilated buildings and outdoors in metropolitan areas is further polluted by tobacco smoke, factory smoke, automobile exhaust, aerosol sprays and many other contaminants. Fresh air is air that is without such pollutants. Country air is called fresh because plants and trees growing there absorb the carbon dioxide and expel oxygen. What a wonderful symbiosis exists here! Plant life and animal life are constantly supplying each other with the needs of life. The air waste product of one is the necessity of the other.

Are the medicos telling us that nature goofed? Is there too much oxygen in the air for our health? Did nature mess up on her proportions? And should we regulate this imbalance ourselves by making sure that we breathe enough stale polluted air along with our fresh air? Well, they have actually stated that too much fresh air can cause health problems, so they really mean that we can get sick if the air that we are breathing does not contain some pollutants. Now aren't all the cigarette smokers going to love that! When they blow smoke in our faces or cloud up the offices that we must work in, they can tell us that they are performing a service for us, for haven't physicians said that air too fresh and pure is a health hazard? And this after the same medical profession has told us that smoking can cause cancer—and made the cigarette manufacturers post a warning on cigarette packages.

Physicians have observed that certain ailments and discomforts follow a person's change from a stale-air situation to a fresh-air situation, and so, without understanding the nature of these changes or the reasons for them, they conclude that fresh air is bad for us. What they fail to recognize is this salutory physiological principle: When the body's condition is improved, the body begins improving itself!

Most of us are living at only part of our health potential. Our bodies are clogged up with uneliminated debris and toxins. This morbid matter cannot be eliminated because of lack of vitality, and vitality is lacking because the body is getting insufficient rest, sleep, fresh air, etc.

The body begins a housecleaning when its circumstances are improved. When the body gets more sleep, better food, more rest and more fresh air, its vitality is enhanced. With increased vitality the body is better able to cope with life-threatening toxins. The expulsion of accumulated toxic matters occasions symptoms which are commonly mislabeled disease and recognized as dangerous. If we believed that such symptoms (which are actually healing crises) really were dangerous, then we should also believe that drug addiction is healthful and getting off drugs is a health hazard because the withdrawal symptoms experienced are pains, headaches, nausea and other illnesses. We should also believe that smoking is healthful because smokers who don't get their accustomed dose of nicotine suffer nervousness, irritability, sleeplessness, headaches, etc. Fortunately, we know that drug addiction and smoking are injurious to our health, and we know that it takes a bit of pain and discomfort to break such habits. We also know that it is desirable to do so and not a health hazard.

It should occur to us that polluted air is also a drug—a poison—and most of us are so steeped in air pollution that s it amounts to an addiction. So when we indulge in fresh pure air and fail to get our usual dose of contaminants, we may suffer various discomforts which are actually "withdrawal symptoms" similar to those suffered by the dope addict. In both cases the real disease is toxemia, while the withdrawal pains, which are symptoms of toxin elimination, are a healthful sign.

If we will but suffer through these discomforts and the bodily housecleaning that they indicate, we will soon be more vital than before—just as the dope addict is in better health after he quits his habit.

It should be self-evident that no amount of polluted air could ever be healthful. The kind of illogical reasoning which says that pure air is unhealthy might be expected from those who have dethroned reason and ask us to believe that drugs restore health. It dates back to the previous century when medical advice would have us keep doors and windows shut while sleeping. Remember-the night air was supposed to be bad. At that time it was also popular medical practice to keep doors closed and shades drawn in sick rooms. Patients were denied fresh air and light and left to languish in their own effluvia. When feverish and suffering from thirst, they were denied water. No wonder so many of them died.

Be assured that fresh air is a healthful agency, and the symptoms it begets as noted in the AMA report are evidences of body improvement-not body destruction. Don't be taken in by error just because such reports are published in a prestigious journal.

Physicians think that they can regulate all our natural functions. They want us to think that they are wiser than the intelligence of the body when they tell us how much we should sleep, how many calorics we should eat, how many glasses of water per day we should drink, and now, how much fresh air we should breathe!

Our own instincts, reason and common sense are far better guides than any such advice that comes from the medical profession. Remember the AMA is a trade association that is in business to make money. Their business flourishes on sick people—not healthy ones. Their advice and their ministrations can make us worse, but they can never make us better (except in the case of mechanical repairs). Under no circumstances can they confer upon us improved health. Only our own practices can lead to health.

So use your own good sense. Sleep when sleepy, drink water when thirsty, eat only when hungry and breathe the cleanest, purest air you can.

Article #4: The Breath Of Death by Prof. Hilton Hotema

Our scientists agree that city air today is a deadly mixture of smoke, soot and fumes, which include carbon monoxide gas, sulphuric acid gas, benzene, methane, sulphur compounds and other dangerous chemicals too numerous to mention.

In addition, city air is saturated with the fumes of motor cars, trucks, buses, gas engines, etc. This exhaust consists of carbon monoxide, carbon dioxide, lead oxide, lead carbonates, free gasoline and complicated benzene chain compounds of the hydrocarbon series.

Let us consider just one of these many poisonous gases, carbon monoxide, and tell only a small part of the damage it does to the body. Tasteless, colorless, odorless, invisible to the eye, this gas takes and has taken a terrible toll of lives in our cities.

The large cities have a huge smoke-blanket over them that holds down these toxic gases and particulates. Especially is this so in damp weather. It tends to smother the people in it.

U.S. authorities have demonstrated a concentration of 0.62 parts of carbon monoxide per 10,000 cubic centimeters of air at street level in busy sections of cities of 500,000 population or more.

There are few poisons more deadly than carbon monoxide. Air containing as little as 150th of one per cent will cause headache, and 120th of one per cent may cause total collapse.

Dr. L. Burns examined blood specimens of more than 20,000 persons to discover the effect of carbon monoxide gas on the body. He said: "Carbon monoxide gas seeps into the blood through the lungs and mixes with the hemoglobin to such an extent that the blood cannot perform its normal function of carrying oxygen to the rest of the body."

The hemoglobin of blood has an affinity for this gas about 300 times greater than for oxygen, making the absorption of the gas by the blood very rapid indeed.

The first symptoms of this poisoning are headache and weakness. More serious symptoms appear as the condition progresses. People are told in food propaganda to eat this and that kind of food to offset weaknesses, as that could overcome poisoning effects.

Scientists at Harvard found that the average man can endure carbon monoxide only until his blood is one-third saturated. The danger of the gas was shown by the way it affected one of the scientists. He had just completed some tests requiring a high degree of skill and was feeling no ill effects of the gas when he suddenly collapsed and had to be carried out and revived.

Small concentrations of the gas can soon bring a man to the breaking point. Five per cent of autos and closed trucks on the roads have sufficient concentrations of the gas to be a menace to drivers and passengers. There is no natural nor acquired immunity to the gas. Repeated exposures produce the same effect each time.

The Chicago Health Department reported that in certain sections of that city the sulphuric acid gas in the air rots clothes hung on wash lines and eats away building stone and metal guttering.

These acids and gases in the air corrode and destroy in time everything they touch. They eat up stone and steel; they eat up clothing and metal guttering; they eat up the body by destroying cells and tissue. Many symptoms of the eating process appear as "mysterious diseases unknown to medical science."

The corrosive acids in the air attack cells and tissues, throat, nose, lungs, brain. They attack the heart, liver, spleen, kidneys and sex organs.

They attack the blood corpuscles and cripple them so seriously that they cannot carry on their normal function. That condition medical art terms "anemia." And for that they prescribe various iron

preparations, vitamin B-12 and other nostrums.

These acids and gases affect the nerves, and the resulting pains medical art calls "neuritis." As the nerves weaken, paralysis may result in whole or in part. And they have treatments for that while the cause continues. They affect the cells of the muscles, producing dull pains that puzzle medical art, and medical doctors cover up by terming it "rheumatism."

The acids and gases attack the tissues of the joints and the medical art calls it "arthritis." They attack the tissues of the air cavities of the cranial bones, and medical art calls it "sinusitis." They attack the throat, and medical art calls it "laryngitis," "tonsilitis," "diptheria," etc. Hoarseness often follows, and in time one's voice weakens, or may be entirely lost.

Sulphuric acids and gases attack the cells of the blood vessels of the heart and medical art calls it "heart disease." They attack the cells of the pancreas, and medical art calls it "diabetes." They attack the cells of the lungs, and medical art calls it "tuberculosis."

Names, names—names that mean nothing aside from indicating the part of the body wherein degeneration is most serious and active from the action of the poisons absorbed from the air. Medical art, ruled largely by superstition and guesswork, and being nothing more than an updated version of ancient voodooism, makes a confusing mystery of what it calls disease. They do this for greed and profit, often, and sometimes from ignorance. The problem is readily solved by recognition of a few simple, basic principles.

The air of the Los Angeles area is exceptionally bad. The Los Angeles Herald said: "Heavy clouds of smoke close to the ground, intermingled smarting fumes that make people bleary-eyed and gasp for breath."

That account stated that "bleary-eyed men" were watching the factory chimneys to discover the source of damaging acrid fumes that killed small animals in the affected areas. During the worst of the "gas attack," nine out of ten persons on the streets were "bleary-eyed" from the smarting fumes. This black pall of smoke makes a ceiling over Los Angeles from 1,500 to 2,000 feet thick and extends outwards for as many as sixty miles.

John F. Gernhardt, M.D., of Los Angeles, stated that more than 30 persons died in the city of heart attack in 24 hours. Polluted air was the cause. It paralyzes the breathing centers of the brain and breathing stops. That is not heart attack.

The press reported that Southern California has lost about 60 percent of its valuable sunlight due to the smoke pall hanging over that area.

Still air, like still water, grows stale, stagnant and poisonous. Doctors appear not to know much about this. The maladies it causes are still attributed to viruses and germs.

Windstorms, tornados and hurricances are cosmic processes of air purification. And plants continuously detoxify and reoxygenize our air. These are yet other secrets of nature not yet discovered by the medical art.

But the discovery was made by a layman who did some thinking. He wrote a book that was published in 1944. It was titled *Floating Air.* It is hard to get a copy now, as medical art dreaded the valuable health guidance it contained and high-pressured the Post Office Department to put it out of circulation.

This man first tested his theory on poultry and was able to relieve in a few hours bad cases of croup and kindred respiratory ailments. That was bad news for medical art, and it had to be suppressed. There were no money-making possibilities in prescribing fresh unpolluted air.

In his chicken house this man put an electric fan to keep the air in motion, thus dissipating the foul fumes of poultry droppings, the inhalation of which makes chickens sick. How many poultry raisers know that?

Very simple. Too simple, It's a deep dark secret of nature the doctors seem not to have discovered. We

can be poisoned by the fumes of our own effluvia.

Many who drop dead or die suddenly are not afflicted with heart disorders as doctors claim. The cause of death is foul air.

The annual report of the Bernard Free Skin and Cancer Hospital asserts that city dwellers, breathing polluted air, "develop lung cancer" at a rate three times greater than inhabitants of rural districts.

The Mellon Institute of Pittsburgh issued a report of a two-year survey covering the damaging effect of polluted air on human health. The report said: "The inhalation of polluted air results in a gradual absorption by the body of the poisonous products. The insensible intake results in a condition of slow-poisoning which insidiously eats away at vital tissues."

Physicians go the other way. They favor still air. They favor the bad and condemn the good. They seem instinctively aware of what's good for their practice.

This man who knew that what applied to chickens also applied to humans put an electric fan and ventilators in his bedroom. This drew in fresh outside air and drove out the stale inside air.

Most homes and bedrooms are filled with stale air, unfit to breathe. People follow the advice of doctors and keep windows closed to keep out those "deadly drafts" of fresh outside air.

Even the gases and vapors expelled by the body are poisonous and pollute the home and bedroom, regardless of whether from lungs, or bowels, or the pores of the skin. When these facts are known, it is easy to understand why people get up in the morning with cold, sore throat and other respiratory disorders.

They blame the weather; so do the physicians. But it does not affect the animals who live out in it! The actual cause is the polluted air in home and bedroom.

So remarkable were the good results this man obtained that he was inspired to build his "miracle cabinet," consisting of a bed with enclosed sides and top, well ventiliated and introducing air electrically with a fan through special vents.

He used the cabinet first for patients with respiratory ailments such as colds, hay fever, sore throat, diptheria, asthma, influenza, pneumonia and tuberculosis. The good results were amazing, and he was encouraged to treat in the same manner patients with all kinds of disorders: fever, mumps, measles, rheumatism, neuritis, diabetes, etc.

His remarkable success proved that good, fresh air in motion will "cure" the sick who failed under other regimens that left them in the same polluted air. He got patients well after medical doctors had declared them incurable physical wrecks. He proved what a few great Doctors have declared: that there is no disease. There are just two conditions of the body—good health and the lack of it.

The symptoms of bad health the doctors are trained to study, group together and give them names (diagnosis) that mean nothing and term them diseases that are trying to kill the patient.

The scheme is supported by centuries of false teaching by which medical art has created a false psychology. They have taught that diseases are "entities" that attack us and mean to kill us. We enlist their aid in fighting these armies of invaders intent on our demise. For them this is very profitable. And just the opposite for us. Medical art is one of the biggest frauds on earth.

The truth bears repeating: Sicknesses are the body's cleansing and reparative efforts. They are friends, not enemies. If you would avoid the crisis of sickness, then don't indulge the causes of sickness. Polluted air is a primary cause of illness and disease.

The surprising results of the man's work and air shocked the medical art. Drugs, vaccines and serums would become obsolete if people learned of this. Something had to be done.

It was better that one good "man should die for the people," than that the medical art should perish. So the heat was turned on the Post Office Department and "this man died for the people." His great work of

helping the sick, after medical doctors had failed, came to a sudden and inglorious end.

In such cases big publications carry lying propaganda that a certain quack who was a menace to the people has been cast into oblivion. And the people believe this. Medical propaganda leads people to believe that medical art is trying to rid the world of so-called disease. In truth they are trying to end their competition. Who can be so silly as to believe that any organization or institution is working to bring about its own end?

The reason why people do believe it is because "better schools make better communities." That is another one of the lies taught in the schools, and people just grow up in it from childhood.

The facts show that all methods not taught in orthodox medical schools, regardless of their value and effectiveness, are banned and crushed by the medical art and their allies, and unorthodox practitioners are usually put in prison—all for the protection of the public health.

This may not be Russia, but many Russian methods are used to dispose of those who interfere with the money-making schemes of big business.